

State HIE Toolkit

Finance Examples & Case Studies

Examples are offered in various sections of the Toolkit to illustrate practices in the field of statewide HIE (**Health Information Exchange**: A government sponsored project to improve communication and information exchange in the medical profession) development to date. However, as information from ONC (**Office of the National Coordinator for Health Information Technology**: A government agency (part of HHS) that oversees and encourages the development of a national, interoperable (compatible) health information technology system to improve the quality and efficiency of health care) approved strategic and operational plans becomes available, it will be integrated into the Toolkit content where appropriate.

Case Studies (Vermont, New York, Delaware)

Vermont

Incorporated in July 2005 and funded in part by the Vermont General Assembly, the Vermont Information Technology Leaders (VITL) is a not-for-profit public-private partnership. Various stakeholders are represented by volunteers who serve on VITL's board of directors, subcommittees, and advisory groups.

VITL is currently providing data services and infrastructure to support the governor's Blueprint for Health chronic disease management initiative. Under this project, data on chronic conditions such as asthma, diabetes and hypertension are provided to the VITL IHE (**Integrating the Healthcare Enterprise**: IHE is an initiative by healthcare professionals and industry to improve the way computer systems in healthcare share information) IHE promotes the coordinated use of established standards such as DICOM and HL7 to address specific clinical need in support of optimal patient care. Systems developed in accordance with IHE communicate with one another better, are easier to implement, and enable care providers to use information more effectively. registry/repository, and then sent to the DocSite platform, which participating physicians use to analyze data and develop interventions.

Another VITL data services project is a medication history service. If a patient presenting in a hospital emergency department gives permission for his or her medication history to be accessed, an inquiry is sent from the hospital's registration system to VITL's data center.

VITL is primarily funded through appropriations from the state of Vermont. The Vermont Legislature has provided \$2.1 million in funding for VITL. As VITL's largest customer, the Vermont Department of Health has provided \$1.8 million and has signed a five-year contract for data services to support its Blueprint for

Health initiative. Other revenues come from organizations that contract with VITL for data services (such as sites subscribing to VITL's medication history service). In addition, \$1 million was raised from payers and other stakeholders for the EHR (**Electronic Health Record**: 'Electronic health record', 'certified EHR' and 'certified EHR technology' have been used interchangeably to signify electronic health record certified pursuant to Section 3001(c)(5) of the Public Health Service Act as added by the ARRA) Pilot Project.

In order to support its state-level HIE (**Health Information Exchange**: A government sponsored project to improve communication and information exchange in the medical profession) efforts and health IT adoption plans, Vermont used a special assessment to create the Vermont Health IT Fund. In April 2008, Vermont passed legislation to create the Vermont Health IT Fund. Drawn down in annual increments by Vermont's state-level HIE (**Health Information Exchange**: A government sponsored project to improve communication and information exchange in the medical profession) organization, the Vermont Health IT Fund will be used to support both statewide HIE (**Health Information Exchange**: A government sponsored project to improve communication and information exchange in the medical profession) and the adoption of certified EHRs. Beginning October 1, 2008, each health insurer operating in Vermont began paying a quarterly fee into the fund. Insurers can choose between paying 0.199% of all healthcare claims paid for their Vermont members in the previous quarter, or a fee based on the insurer's proportion of overall claims in the past year, as calculated by the Vermont Department of Banking, Insurance, Securities and Health Care Administration. Vermont's Medicaid Agency is making a voluntary annual contribution of approximately \$250,000 per year. Vermont's Health Care Information Technology Reinvestment Fee is expected to raise a total of approximately \$32 million over the next seven years.

When estimating the need for funding, VITL looked at the cost of operating the HIE (**Health Information Exchange**: A government sponsored project to improve communication and information exchange in the medical profession), building interfaces, and providing grants to approximately 122 independent primary care practices that lack EHRs.

Operating expenses such as staffing, rent, electric bills, and professional development total approximately \$1.5 million a year. To avoid substantial capital costs up front, VITL leases its technical infrastructure from its prime contractor, GE Healthcare.

Legislatively mandated, each health insurer in Vermont will pay 0.199 percent on all medical claims into an HIT (**Health Information Technology**: Certified EHRs and other technology and connectivity required to meaningfully use and exchange electronic health information) fund. This fund will raise approximately \$32 million over the next seven years to support HIT (**Health Information Technology**: Certified EHRs and other technology and connectivity required to meaningfully use and exchange electronic health information) and the electronic HIE (**Health Information Exchange**: A government sponsored project to improve communication and information exchange in the medical profession) efforts of VITL.

New York

As part of a broader health reform initiative, New York is currently spending over \$200 million developing and implementing a statewide interoperable health information infrastructure. The technical framework includes 3 main building blocks: (1) the 3C's: interoperable electronic health records for clinicians, personal health records for consumers, and community information portals; (2) Clinical Informatics Services (CIS) to aggregate, analyze, measure and report data for population health and quality purposes; and (3) the Statewide Health Information Network for New York (SHIN-NY) providing an architecture, common health information exchange protocols and standards to share information among providers and with patients.

The bedrock component of the technical infrastructure is the Statewide Health Information Network for New York (SHIN-NY). The SHIN-NY is a network of networks based on common information policies, architecture patterns, protocols and standards, collectively referred to as statewide policy guidance. The New York eHealth Collaborative (NYeC) is a statewide, non-profit, public-private collaborative body designated by the state to govern the SHIN-NY and set statewide policy guidance through an open and transparent process. A key component of NYeC's structure includes regional governance entities called RHIOs responsible for implementing and ensuring adherence to the statewide policy guidance. NYeC and nine state designated RHIOs have received funding from the state's Health Care Efficiency and Affordability Law for New Yorkers Capital Grant Program (HEAL NY), which is the primary mechanism for distributing the funding earmarked for health information technology (health IT) initiatives. Near equal amounts of HEAL NY funding are also dedicated to interoperable EHR (**Electronic Health Record**: 'Electronic health record', 'certified EHR' and 'certified EHR technology' have been used interchangeably to signify electronic health record certified pursuant to Section 3001(c)(5) of the Public Health Service Act as added by the ARRA) adoption in communities across the state.

The technical infrastructure constitutes only one aspect of the overall strategy. Even more important, the state is focusing a considerable amount of effort on developing the organizational and clinical infrastructure, including forward-thinking policy, governance structures and extension services for clinicians in order to advance and maintain New York's health information infrastructure in the public's interest and ensure the longer term goal of improving health outcomes for all New Yorkers is achieved.

Much of the Statewide Health Information Network for New York (SHIN-NY) is being funded through a state grant program, the Health Care Efficiency and Affordability Law for New Yorkers Capital Grant Program (HEAL NY). Although, stringent matching requirements includes significant amounts of private sectors dollars as well.

HEAL NY started in 2004, in part due to findings from the Burger Commission (also known as the 21st Century Health Care Commission), which recommended restructuring New York's hospital system into a more holistic care delivery system. To fund the Burger Commission's restructuring recommendations, the State used a the state bonding authority of the Dormitory Authority of the State of New York, a legislatively created public benefit corporation serving the people of New York with the authority to issue tax-exempt securities to help fund public and nonprofit construction. The Dormitory Authority was

authorized to issue bonds of up to \$1 billion in total over 5 years: \$750 million for restructuring the state hospital system and \$250 million is for health IT infrastructure projects. The most recent round of HEAL NY health IT grants announced in March 2008 awarded \$105 million dollars to 19 community based HIT (**Health Information Technology**: Certified EHRs and other technology and connectivity required to meaningfully use and exchange electronic health information) initiatives to advance New York's health information infrastructure as part of a comprehensive plan.

Other funds for health IT have come from federal sources. In 2008, the State was awarded a \$20 million grant from the Centers for Disease Control to foster improved collaborations between federal, state, and local public health officials while at the same time improving their capacity to use HIE (**Health Information Exchange**: A government sponsored project to improve communication and information exchange in the medical profession) for public health surveillance and disease reporting. In addition, New York uses federal-state match funds through its Medicaid section 1115 Demonstration known as the Federal-State Health Reform Partnership (F-SHARP). NYeC received \$5 million from New York State to stand up and manage a statewide governance structure and process with multiple stakeholders, develop and vet statewide policy guidance and prepare to govern the SHIN-NY. NYeC also received \$2.8 million from the U.S. Department of Health and Human Services to participate in the National Health Information Network (NHIN) (**Nationwide Health Information Network**: Describes the technologies, standards, laws, policies, programs and practices that enable health information to be shared among health decision makers, including consumers and patients, to promote improvements in health and healthcare). The development of a vision for the NHIN began more than a decade ago with publication of an Institute of Medicine report, 'The Computer-Based Patient Record.' The path to a national network of healthcare information is through the successful establishment of RHIO.) Trial Implementation project.

Delaware

In Delaware, the Delaware Health Information Network (DHIN) serves as the coordinating body for statewide eHealth activities. In 1997, Delaware General Assembly established DHIN as a public instrumentality of the State, under the direction of the Health Care Commission to advance the creation of statewide health information and an electronic data interchange network for public and private use.

DHIN has a board of directors which represents various community and professional stakeholders. Its Consumer Advisory Committee includes broad representation ranging from the public health community to political, consumer, faith-based, healthcare and clinical bodies. The project management team has representation from all of the data contributors and technology support personnel for DHIN, such as Medicity, Perot Systems, LabCorp, and participating hospitals.

DHIN's technical approach is built on a centrally managed federated model. Data from each contributing Provider (**Provider**: All providers included in the definition of 'Health Care Provider' in Section 3000(3) of the Public Health Service Act (PHSA) as added by ARRA) This includes, though it is not limited to, hospitals, physicians, priority primary care providers, Federally Qualified Health Centers (and 'Look-

Alikes') and Rural Health Centers. is maintained in separate data stages. Each Provider (**Provider:** All providers included in the definition of 'Health Care Provider' in Section 3000(3) of the Public Health Service Act (PHSA) as added by ARRA). This includes, though it is not limited to, hospitals, physicians, priority primary care providers, Federally Qualified Health Centers (and 'Look-Alikes') and Rural Health Centers. accesses and manages its own data within the DHIN data center. DHIN has a MPI (**Master Patient Index:** A central index of patient records used for the purpose of matching records from different sources and accurately relating that data to the same patient). An MPI usually does not have medical data contained within it, and may or may not point to medical data found elsewhere. and RLS (**Record Locator Services:** An index containing patient demographic information and the location of a patient's medical records). It typically contains no clinical information. Participating entities decide whether or not to put record locations into the RLS. Designed to take a query in the form of demographic details and return only the location of matching records. that stores a patient identification number and meta data, pointing the system to the data stage(s) in which the clinical data is available. One single view of the patient's history is then presented to the authorized user, but this data is not stored centrally.

Currently, organizations participating in the HIE (**Health Information Exchange:** A government sponsored project to improve communication and information exchange in the medical profession) include three hospital systems (which include five hospitals), and LabCorp. In 2009, DHIN's data exchange capability included transactions for:

- laboratory;
- radiology;
- pathology;
- admission, discharge and transfer information;
- face sheets (including demographic data); and
- forwarding of reports and results for referral and consult

DHIN receives a combination of federal, state, and private funding. In 2005, DHIN received funding from AHRQ for a total budget of \$4.7 million. In 2006, the first year of implementation, the State of Delaware allocated \$2 million dollars to the HIE (**Health Information Exchange:** A government sponsored project to improve communication and information exchange in the medical profession) under the requirement that these funds were matched by the private sector. Funding in the amount of a \$2 million from the participating hospitals and labs as well as Blue Cross Blue Shield of Delaware was contributed to match the state funds.

With the allocated funding, a three year capital plan was developed to guide the start up and base functionality of the HIE (**Health Information Exchange:** A government sponsored project to improve communication and information exchange in the medical profession). This plan included building the system from the bottom up, adding base functionality – results delivery, patient record inquiry, medication, and convening stakeholders. Therefore, \$5 million was required for start up, operation and basic functionality in the first year. In this phase, DHIN has been able to include 85% of lab tests and 81% of hospital data in the HIE (**Health Information Exchange:** A government sponsored project to improve communication and information exchange in the medical profession). It was a priority for DHIN to have a

critical mass of data running through the HIE (**Health Information Exchange:** A government sponsored project to improve communication and information exchange in the medical profession) before expanding the user base. In the capital phase, costs were higher due to building functionality and adding additional data sources. However, the respondent added that costs will be reduced in the maintenance phase of the HIE (**Health Information Exchange:** A government sponsored project to improve communication and information exchange in the medical profession) because new functionality and additional hardware will be minimal.

The private sector is invoiced quarterly and matching funds are taken from the State. In the second year, the State allocated \$3 million dollars to the HIE (**Health Information Exchange:** A government sponsored project to improve communication and information exchange in the medical profession), which also must be matched with funding from the private sector. Private sector participants are charged based on the volume of transactions. Therefore, a large data Provider (**Provider:** All providers included in the definition of 'Health Care Provider' in Section 3000(3) of the Public Health Service Act (PHSA) as added by ARRA). This includes, though it is not limited to, hospitals, physicians, priority primary care providers, Federally Qualified Health Centers (and 'Look-Alikes') and Rural Health Centers. pays more than a small data Provider (**Provider:** All providers included in the definition of 'Health Care Provider' in Section 3000(3) of the Public Health Service Act (PHSA) as added by ARRA). This includes, though it is not limited to, hospitals, physicians, priority primary care providers, Federally Qualified Health Centers (and 'Look-Alikes') and Rural Health Centers. does to deliver results through the system. Costs are appropriated based on transaction counts and the percents are applied to the total funds from the public sector that are necessary to run the HIE (**Health Information Exchange:** A government sponsored project to improve communication and information exchange in the medical profession).

When new data partners are added to the system, the percentages are reallocated. DHIN is currently defining its sustainability plan. It anticipates that this model will be used moving forward; a per-transaction cost and volume of transactions will be used to allocate costs for data senders. For health plans (including the state), there will likely be a per member per month fee (PMPM). A subscription fee may be charged to partners that would like value added services, such as the "EMR Primer."